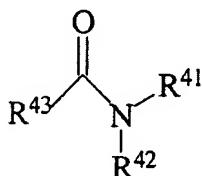


AMENDMENTS TO THE CLAIMS

1. (Currently amended) A photothermographic material comprising, on one side of a support, a photosensitive silver halide, a non-photosensitive silver salt of an organic acid, a reducing agent for silver ions and a binder, which is characterized by containing at least one phenol compound as the reducing agent and

at least one compound having a hydrogen bond formation rate constant K_f that is 20-4000, and which is represented by the following formula (IV):



(IV)

wherein:

and in the formula (IV), R⁴¹ and R⁴² independently represent an alkyl group, an aryl group or a heterocyclic group, R⁴³ represents an alkyl group, an aryl group, a heterocyclic group or N-(R⁴⁴)(R⁴⁵) where R⁴⁴ and R⁴⁵ independently represent an alkyl group, an aryl group or a heterocyclic group, and

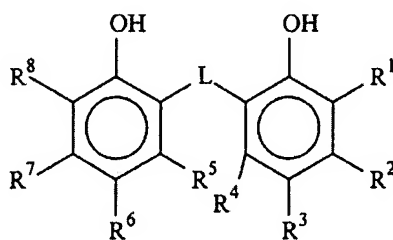
the formula (IV) further includes the following (1), (2) and (3):

(1) wherein R⁴¹ and R⁴² which independently represent an alkyl group, an aryl group or a heterocyclic group, may be taken together to form a ring where R⁴¹ and R⁴² taken together are atoms necessary to form the ring, and R⁴³ represents an alkyl group, an aryl group a heterocyclic group or -N(R⁴⁴)(R⁴⁵) where R⁴⁴ and R⁴⁵ independently represent an alkyl group, an aryl group or a heterocyclic group; and when

(2) R⁴³ represents -N(R⁴⁴)(R⁴⁵), R⁴¹ and R⁴² are taken together to form a ring where R⁴¹ and R⁴² taken together are atoms necessary to form the ring, and R⁴⁴ and R⁴⁵ independently represent an alkyl group, an aryl group or a heterocyclic group; and

(3) R^{43} represents $-N(R^{44})(R^{45})$, then R^{44} and R^{45} , each independently representing an alkyl group, an aryl group or a heterocyclic group, may be taken together to form a ring where R^{44} and R^{45} taken together are atoms necessary to form the ring, and R^{41} and R^{42} independently represent an alkyl group, an aryl group or a heterocyclic group or at least one of R^{41} and R^{42} , each independently representing an alkyl group, an aryl group or a heterocyclic group, and at least one of R^{44} and R^{45} , each independently representing an alkyl group, an aryl group or a heterocyclic group, may be taken together to form a ring.

2. (Previously Presented) The photothermographic material according to claim 1, wherein the phenol compound is at least one o-polyphenol compound represented by the following formula I



(I)

wherein R^2 , R^4 , R^5 , and R^7 are hydrogen atoms, R^1 and R^8 represent an alkyl group and R^3 and R^6 represent an alkyl group, and L represents a group $-CHR^9$ where R^9 represents a hydrogen atom, a methyl group, an ethyl group, an isopropyl group, an n-propyl group, a heptyl group, a 1-ethylpentyl group, and an undecyl group.

3. (Original) The photothermographic material according to claim 1 or 2, wherein the hydrogen bond formation rate constant Kf is 70 to 4000.

4. (Previously Presented) The photothermographic material according to claim 1 or 2, wherein the hydrogen bond formation rate constant Kf is 100-4000.

5. (Previously Presented) The photothermographic material according to claim 1 or 2, wherein the hydrogen bond formation rate constant K_f is 250-2000.

6-9. (Canceled)

10. (Previously Presented) The photothermographic material according to claim 1 or 2, wherein the amount of the phenol compound is 0.01-40 g/m².

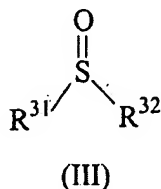
11. (Previously Presented) The photothermographic material according to claim 1 or 2, wherein the amount of said at least one compound is 0.01-40g/m².

12. (Currently amended) A photothermographic material comprising, on one side of a support, a photosensitive silver halide, a non-photosensitive silver salt of an organic acid, a reducing agent for silver ions and a binder, which is characterized by containing at least one phenol compound as the reducing agent,

a metal or metal complex of Group VIII to Group X in the periodic table of elements,

a polyhalogenated compound and

at least one compound having a hydrogen bond formation rate constant K_f that is 20-4000, and which is represented by the following formula (III):

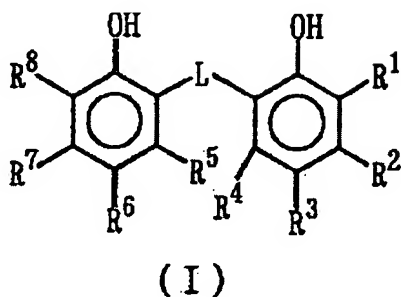


wherein:

in the formula (III), R^{31} and R^{32} independently represent an alkyl group, an aryl group or a heterocyclic group, and R^{31} and R^{32} may be taken together to form a ring,

wherein the phenol compound is at least one o-polyphenol compound represented by the

following formula (I):



wherein R^2 , R^4 , R^5 and R^7 are hydrogen atoms, R^1 and R^8 represent an alkyl group and R^3 and R^6 represent an alkyl group, and L represents a group $-\text{CHR}^9-$ where R^9 represents a hydrogen atom, a methyl group, an ethyl group, an isopropyl group, an n-propyl group, a heptyl group, a 1-ethylpentyl group, and undecyl group, and

wherein the compound represented by the formula (III) or the reducing agent for the silver ions having been added in the form of solid microparticle dispersion to form the photothermographic material.

13. (Previously presented) The photothermographic material according to Claim 12, wherein the metal or the center metal of the metal complex of Group VIII to X is rhodium, rhenium, ruthenium, osmium or iridium.

14. (Previously presented) The photothermographic material according to Claim 12, which contains two or more kinds of the metal and/or the metal complex of Group VIII to X.

15. (Previously presented) The photothermographic material according to Claim 12, wherein the photosensitive silver halide has been subjected to chemical sensitization.

16. (Previously presented) The photothermographic material according to Claim 15, wherein the chemical sensitization is sulfur sensitization, selenium sensitization or tellurium sensitization.

17-18. (Canceled)

19. (Previously presented) The photothermographic material according to Claim 12, wherein the hydrogen bond formation rate constant K_f is 70 to 4000.

20. (Previously presented) The photothermographic material according to Claim 12, wherein the hydrogen bond formation rate constant K_f is 100 to 4000.

21. (Previously presented) The photothermographic material according to Claim 12, wherein the hydrogen bond formation rate constant K_f is 250 to 2000.

22. (New) The photothermographic material according to Claim 1, wherein the photothermographic material comprises the compound represented by the formula (IV) and the reducing agent for silver ions in a molar ratio of 0.1 to 10.

23. (New) The photothermographic material according to Claim 1, wherein the photothermographic material comprises the compound represented by the formula (IV) and the reducing agent for silver ions in a molar ratio of 0.1 to 2.0

24. (New) The photothermographic material according to Claim 1, wherein the photothermographic material comprises the compound represented by the formula (IV) and the reducing agent for silver ions in a molar ratio of 0.5 to 1.5.

25. (New) The photothermographic material according to Claim 1, wherein the compound represented by the formula (IV) having been added in the form of solid microparticle dispersion to form the photothermographic material.

26. (New) The photothermographic material according to Claim 12, wherein the compound represented by the formula (III) having been added in the form of solid microparticle dispersion to form the photothermographic material.

27. (New) The photothermographic material according to Claim 12, wherein both the compound represented by the formula (III) and the reducing agent for the silver ions having been added in the form of solid microparticle dispersion to form the photothermographic material.